



```

LL      IIIIII  BBBB8888  TTTTTTTTTT  RRRRRRRR  NN      NN  LL      000000  GGGGGGGG
LL      IIIIII  BBBB8888  TTTTTTTTTT  RRRRRRRR  NN      NN  LL      000000  GGGGGGGG
LL      II      BB      BB  TT      TT  RR      RR  NN      NN  LL      00      00  GG
LL      II      BB      BB  TT      TT  RR      RR  NN      NN  LL      00      00  GG
LL      II      BB      BB  TT      TT  RR      RR  NNNN     NN  LL      00      00  GG
LL      II      BB      BB  TT      TT  RR      RR  NNNN     NN  LL      00      00  GG
LL      II      BBBB8888  TT      TT  RRRRRRRR  NN  NN  NN  LL      00      00  GG
LL      II      BBBB8888  TT      TT  RRRRRRRR  NN  NN  NN  LL      00      00  GG
LL      II      BB      BB  TT      TT  RR      RR  NN      NN  LL      00      00  GG
LL      II      BB      BB  TT      TT  RR      RR  NN      NN  LL      00      00  GG
LL      II      BB      BB  TT      TT  RR      RR  NN      NN  LL      00      00  GG
LL      II      BB      BB  TT      TT  RR      RR  NN      NN  LL      00      00  GG
LLLLLLLLLLLL  IIIIII  BBBB8888  TT      TT  RR      RR  NN      NN  LLLLLLLLLL  000000  GGGGGG
LLLLLLLLLLLL  IIIIII  BBBB8888  TT      TT  RR      RR  NN      NN  LLLLLLLLLL  000000  GGGGGG

```

```

LL      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SSSSSS
LL      II      SSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LLLLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLLLL  IIIIII  SSSSSSSS

```

```

1 0001 0 MODULE LIB$SYS_TRNLOG (%TITLE'Translate logical name'
2 0002 0 IDENT = '1-010' ! File: LIBTRNLOG.B32 EDIT: SBL1010
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
9 0009 1 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS. *
10 0010 1 * ALL RIGHTS RESERVED. *
11 0011 1 *
12 0012 1 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED *
13 0013 1 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE *
14 0014 1 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER *
15 0015 1 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY *
16 0016 1 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY *
17 0017 1 * TRANSFERRED. *
18 0018 1 *
19 0019 1 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE *
20 0020 1 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT *
21 0021 1 * CORPORATION. *
22 0022 1 *
23 0023 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS *
24 0024 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
25 0025 1 *
26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1
30 0030 1 ++
31 0031 1 FACILITY: General Library Support
32 0032 1
33 0033 1 ABSTRACT:
34 0034 1
35 0035 1 Using $TRNLOG translate a logical name, returning the
36 0036 1 resultant string using the semantics of the caller's string.
37 0037 1 Parameter DSBMSK is presented to this routine by-reference and
38 0038 1 is promoted to by-value for presentation to $TRNLOG
39 0039 1
40 0040 1 ENVIRONMENT: VAX-11 User Mode
41 0041 1
42 0042 1 AUTHOR: R. Reichert, CREATION DATE: 20-SEPT-1979
43 0043 1
44 0044 1 MODIFIED BY:
45 0045 1
46 0046 1 1-001 - Original. RKR 20-SEPT-1979
47 0047 1 1-002 - Change name to LIB$SYS_TRNLOG. RKR 15-OCT-79
48 0048 1 1-003 - Correct some minor errors in RSLLEN and returning
49 0049 1 status, and improve the comments. JBS 19-OCT-1979
50 0050 1 1-004 - Add code to promote by-reference parameter to by-value
51 0051 1 parameter. RKR 1-NOV-79
52 0052 1 1-005 - Change STR$ codes to LIB$ codes. RKR 22-JAN-80
53 0053 1 1-006 - Enhance to recognize additional classes of string descriptors
54 0054 1 on output by always getting data into internal buffer and
55 0055 1 using LIB$COPY DXDX6 to deliver to caller's buffer.
56 0056 1 LIB$ANALYZE_SDESC_R3 is used to compute the number of bytes
57 0057 1 actually copied after the copy operation completes.

```

```
: 58      0058 1  !      Change to use LIB$SCOPY_DXDX6 instead of STR$COPY DX. This
: 59      0059 1  !      avoids having to change STR$ statuses to LIB$ statuses and
: 60      0060 1  !      eliminates need for a handler.
: 61      0061 1  !      RKR 29-MAY-1981.
: 62      0062 1  ! 1-007 - Add special-case code to process string descriptors that
: 63      0063 1  ! "read" like fixed string descriptors. RKR 7-OCT-1981.
: 64      0064 1  ! 1-008 - Redirect jsb's from LIB$ANALYZE_SDESC_R3 to
: 65      0065 1  ! LIB$ANALYZE_SDESC_R2. Use LIB$SCOPY_RDX6 for copying.
: 66      0066 1  !      RKR 18-NOV-1981.
: 67      0067 1  ! 1-009 - Use LNM$C_NAMLENGTH as the maximum name/translation length.
: 68      0068 1  ! Use prologue file, other improvements. SBL 10-Jan-1983
: 69      0069 1  ! 1-010 - Return status from $TRNLOG if otherwise successful. SBL 15-Mar-1983
: 70      0070 1  ! --
: 71      0071 1  !
: 72      0072 1  ! <BLF/PAGE>
```

```
74 0073 1 |
75 0074 1 | PROLOGUE FILE:
76 0075 1 |
77 0076 1 |
78 0077 1 | REQUIRE 'RTLIN:LIBPROLOG';          ' LIB$ definitions
79 0148 1 |
80 0149 1 |
81 0150 1 | TABLE OF CONTENTS:
82 0151 1 |
83 0152 1 |
84 0153 1 | FORWARD ROUTINE
85 0154 1 | LIB$SYS_TRNLOG;          ! Translate logical name
86 0155 1 |
87 0156 1 |
88 0157 1 | MACROS:
89 0158 1 |
90 0159 1 | NONE
91 0160 1 |
92 0161 1 | EQUATED SYMBOLS:
93 0162 1 |
94 0163 1 | NONE
95 0164 1 |
96 0165 1 | OWN STORAGE:
97 0166 1 |
98 0167 1 | NONE
99 0168 1 |
100 0169 1 | EXTERNAL REFERENCES:
101 0170 1 |
102 0171 1 |
103 0172 1 | EXTERNAL ROUTINE
104 0173 1 | LIB$ANALYZE_SDESC_R2 : LIB$ANALYZE_SDESC_R2$LINKAGE, ! Extract length
105 0174 1 | ! and address of
106 0175 1 | ! 1st data byte
107 0176 1 | ! from descriptor
108 0177 1 | LIB$COPY_DXDX;          ! Copy string by descriptor.
```

```

110 0178 1 GLOBAL ROUTINE LIBSSYS TRNLOG (%SBTTL'Translate logical name'
111 0179 1 LOGNAM: REF BLOCK [, BYTE] : Logical name descriptor
112 0180 1 RSLLEN: REF VECTOR [, WORD] : Result length
113 0181 1 RSLBUF: REF BLOCK [, BYTE] : Resultant string
114 0182 1 TABLE: REF VECTOR [, BYTE] : Table number
115 0183 1 ACMODE: REF VECTOR [, BYTE] : Access mode
116 0184 1 DSBMSK: REF VECTOR [, BYTE] : Disable mask
117 0185 1 ) =
118 0186 1
119 0187 1 ++
120 0188 1 FUNCTIONAL DESCRIPTION:
121 0189 1
122 0190 1 Using $TRNLOG translate a logical name, returning the
123 0191 1 resultant string using the semantics of the caller's string.
124 0192 1 Parameter DSBMSK is presented to this routine by-reference and
125 0193 1 is promoted to by-value for presentation to $TRNLOG
126 0194 1
127 0195 1 See $TRNLOG system service description
128 0196 1
129 0197 1 FORMAL PARAMETERS:
130 0198 1
131 0199 1 LOGNAM.rt.dx address of logical name string descriptor
132 0200 1
133 0201 1 RSLLEN.wv.r address of word to receive length of
134 0202 1 resultant name string
135 0203 1 (Optional parameter)
136 0204 1
137 0205 1 RSLBUF.wt.dx address of result string buffer descriptor
138 0206 1
139 0207 1 TABLE.wb.r address of byte to receive logical name table
140 0208 1 number
141 0209 1 (Optional parameter)
142 0210 1
143 0211 1 ACMODE.wb.r address of byte to receive access mode of entry
144 0212 1 (process table only)
145 0213 1 (Optional parameter)
146 0214 1
147 0215 1 DSBMSK.rbu.r Address of
148 0216 1 table search disable mask
149 0217 1 (Optional parameter)
150 0218 1
151 0219 1 Bit Set Meaning
152 0220 1 -----
153 0221 1
154 0222 1 0 Do not search system
155 0223 1 1 Do not search group
156 0224 1 2 Do not search process
157 0225 1
158 0226 1 IMPLICIT INPUTS:
159 0227 1
160 0228 1 NONE
161 0229 1
162 0230 1 IMPLICIT OUTPUTS:
163 0231 1
164 0232 1 NONE
165 0233 1
166 0234 1 COMPLETION CODES:

```

```

167 0235 1
168 0236 1 SSS_NORMAL Procedure successfully completed
169 0237 1 LIB$ WRONUMARG Wrong number of arguments
170 0238 1 From LIB$COPY DXDX
171 0239 1 LIB$ STRTRU Success, but source string truncated
172 0240 1 LIB$ INSVIRMEM Insufficient virtual memory
173 0241 1 LIB$ INVSTRDES Invalid string descriptor
174 0242 1 From $TRNLOG
175 0243 1 SSS_NOTRAN Successful, but input logical name string was
176 0244 1 placed in output buffer because no equivalence
177 0245 1 name was found.
178 0246 1 SSS_ACCVIO The logical name string or string descriptor
179 0247 1 cannot be read, or the output length, output
180 0248 1 buffer, or table or access mode field cannot
181 0249 1 be written by the caller.
182 0250 1 SSS_IVLOGNAM The specified logical name string has a length
183 0251 1 of zero or has too many characters.
184 0252 1
185 0253 1 SIDE EFFECTS:
186 0254 1
187 0255 1 NONE
188 0256 1
189 0257 1 --
190 0258 1
191 0259 2 BEGIN
192 0260 2
193 0261 2 BUILTIN
194 0262 2 NULLPARAMETER;
195 0263 2
196 0264 2 LOCAL
197 0265 2 LOCAL_RSLBUF: VECTOR [LNMSC_NAMLENGTH, BYTE], ! Local resultant buffer
198 0266 2 LOCAL_RSLBUF_DESC : BLOCK [8, BYTE], ! Descriptor for local buffer
199 0267 2 LOCAL_LOGNAM_DESC: BLOCK [8, BYTE], ! Local copy of LOGNAM descriptor
200 0268 2 STATUS1, TRNLOG_STATUS, COPY_STATUS; ! Statuses from called routines
201 0269 2
202 0270 2 !+
203 0271 2 ! Validate argument count.
204 0272 2 !-
205 0273 2
206 0274 2 $LIB$VALIDATE_ARGCOUNT (3,6);
207 0275 2
208 0276 2 !+
209 0277 2 ! Construct static descriptor to describe LOGNAM string.
210 0278 2 !-
211 0279 2
212 0280 2 LOCAL_LOGNAM_DESC [DSC$B_DTYPE] = DSC$K_DTYPE_T;
213 0281 2 LOCAL_LOGNAM_DESC [DSC$B_CLASS] = DSC$K_CLASS_S;
214 0282 2 STATUS1 = LIB$ANALYZE_SDESC R2 (LOGNAM [0,0,0,0];
215 0283 2 LOCAL_LOGNAM_DESC [DSC$B_LENGTH], LOCAL_LOGNAM_DESC [DSC$A_POINTER]);
216 0284 2 IF NOT .STATUS1
217 0285 2 THEN
218 0286 2 RETURN .STATUS1;
219 0287 2
220 0288 2 !+
221 0289 2 ! Construct a static descriptor to receive the translated string from
222 0290 2 ! VAX/VMS
223 0291 2 !-

```

```
224 0292 2
225 0293 2
226 0294 2 LOCAL_RSLBUF_DESC [DSC$W_LENGTH] = LNMSC NAMLENGTH;
227 0295 2 LOCAL_RSLBUF_DESC [DSC$B_DTYPE] = DSC$K_DTYPE_T;
228 0296 2 LOCAL_RSLBUF_DESC [DSC$B_CLASS] = DSC$K_CLASS_S;
229 0297 2 LOCAL_RSLBUF_DESC [DSC$A_POINTER] = LOCAL_RSLBUF;
230 0298 2
231 0299 2 !+
232 0300 2 ! Do the $TRNLOG.
233 0301 2 !-
234 P 0302 2 TRNLOG_STATUS = $TRNLOG (
235 P 0303 2 LOGNAM = LOCAL_LOGNAM_DESC [0,0,0,0],
236 P 0304 2 RSLLEN = LOCAL_RSLBUF_DESC [DSC$W_LENGTH],
237 P 0305 2 RSLBUF = LOCAL_RSLBUF_DESC [0,0,0,0],
238 P 0306 2 TABLE = (IF NULLPARAMETER(4) THEN 0 ELSE TABLE [0]),
239 P 0307 2 ACMODE = (IF NULLPARAMETER(5) THEN 0 ELSE ACMODE [0]),
240 0308 2 DSBMSK = (IF NULLPARAMETER(6) THEN 0 ELSE .DSBMSK [0]);
241 0309 2
242 0310 2 !+
243 0311 2 ! Copy internal buffer to caller's buffer, letting LIB$SCOPY_DXDX
244 0312 2 ! worry about its semantics.
245 0313 2 !-
246 0314 2
247 0315 2 COPY_STATUS = LIB$SCOPY_DXDX (LOCAL_RSLBUF_DESC [0,0,0,0],
248 0316 2 RSLBUF [0,0,0,0]);
249 0317 2
250 0318 2 !+
251 0319 2 ! Store result string length if desired.
252 0320 2 !-
253 0321 2
254 0322 2 IF RSLLEN [0] NEQA 0
255 0323 2 THEN
256 0324 2 BEGIN
257 0325 2 LIB$ANALYZE_SDESC R2 (RSLBUF [0,0,0,0]; RSLLEN [0]);
258 0326 2 IF .RSLLEN [0] GTRU .LOCAL_RSLBUF_DESC [DSC$W_LENGTH]
259 0327 2 THEN
260 0328 2 RSLLEN [0] = .LOCAL_RSLBUF_DESC [DSC$W_LENGTH];
261 0329 2 END;
262 0330 2
263 0331 2 !+
264 0332 2 ! At this point we have 2 statuses that we could return to caller.
265 0333 2 ! Determine which one is the "most meaningful".
266 0334 2 ! If $TRNLOG returned anything other than SSS_NORMAL, then return that
267 0335 2 ! status, otherwise return the copy status.
268 0336 2 !-
269 0337 2
270 0338 2 IF .TRNLOG_STATUS NEQU SSS_NORMAL
271 0339 2 THEN
272 0340 2 RETURN .TRNLOG_STATUS;
273 0341 2 RETURN .COPY_STATUS;
274 0342 2
275 0343 2 END; ! end of LIBSSYS_TRNLOG
```

```
.TITLE LIBSSYS_TRNLOG Translate logical name
.IDENT \1-010\
```



					.EXTRN LIB\$ANALYZE_SDESC_R2	
					.EXTRN LIB\$SCOPY_DXDX, LIB\$_WRONUMARG	
					.EXTRN SYS\$TRNLOG	
					.PSECT _LIB\$CODE, NOWRT, SHR, PIC, 2	
			007C 00000		.ENTRY LIBSSYS_TRNLOG, Save R2,R3,R4,R5,R6	0178
50	56	000C0000G	00	9E 00002	MOVAB LIB\$ANALYZE_SDESC_R2, R6	
	5E	FEF0	CE	9E 00009	MOVAB -272(SP), SP	
	6C		03	83 0000E	SUBB3 #3, (AP), DIFF	0274
	03		50	91 00012	CMPB DIFF, #3	
			08	1B 00015	BLEQU 1\$	
	50	00000000G	8F	D0 00017	MOVL #LIB\$_WRONUMARG, R0	
				04 0001E	RET	
02	AE	010E	8F	B0 0001F 1\$:	MOVW #270, LOCAL_LOGNAM_DESC+2	0280
	50	04	AC	D0 00025	MOVL LOGNAM, R0	0283
			66	16 00029	JSB LIB\$ANALYZE_SDESC_R2	
	6E		51	B0 0002B	MOVW R1, LOCAL_LOGNAM_DESC	
04	AE		52	D0 0002E	MOVL R2, LOCAL_LOGNAM_DESC+4	
	01		50	E8 00032	BLBS STATUS1, 2\$	0284
				04 00035	RET	
08	AE	010E00FF	8F	D0 00036 2\$:	MOVL #17694975, LOCAL_RSLBUF_DESC	0293
0C	AE	10	AE	9E 0003E	MOVAB LOCAL_RSLBUF, LOCAL_RSLBUF_DESC+4	0296
	06		6C	91 00043	CMPB (AP), #6	0308
			05	1F 00046	BLSSU 3\$	
		18	AC	D5 00048	TSTL 24(AP)	
			04	12 0004B	BNEQ 4\$	
			7E	D4 0004D 3\$:	CLRL -(SP)	
			04	11 0004F	BRB 5\$	
	7E	18	BC	9A 00051 4\$:	MOVZBL @DSBMSK, -(SP)	
	05		6C	91 00055 5\$:	CMPB (AP), #5	
			05	1F 00058	BLSSU 6\$	
		14	AC	D5 0005A	TSTL 20(AP)	
			04	12 0005D	BNEQ 7\$	
			7E	D4 0005F 6\$:	CLRL -(SP)	
			03	11 00061	BRB 8\$	
		14	AC	DD 00063 7\$:	PUSHL ACMODE	
	04		6C	91 00066 8\$:	CMPB (AP), #4	
			05	1F 00069	BLSSU 9\$	
		10	AC	D5 0006B	TSTL 16(AP)	
			04	12 0006E	BNEQ 10\$	
			7E	D4 00070 9\$:	CLRL -(SP)	
			03	11 00072	BRB 11\$	
		10	AC	DD 00074 10\$:	PUSHL TABLE	
		14	AE	9F 00077 11\$:	PUSHAB LOCAL_RSLBUF_DESC	
		18	AE	9F 0007A	PUSHAB LOCAL_RSLBUF_DESC	
		14	AE	9F 0007D	PUSHAB LOCAL_LOGNAM_DESC	
00000000G	00		06	FB 00080	CALLS #6, SYS\$TRNLOG	
	54		50	D0 00087	MOVL R0, TRNLOG_STATUS	
		0C	AC	DD 0008A	PUSHL RSLBUF	0316
		0C	AE	9F 0008D	PUSHAB LOCAL_RSLBUF_DESC	0315
00000000G	00		02	FB 00090	CALLS #2, LIB\$SCOPY_DXDX	0316
	55		50	D0 00097	MOVL R0, COPY_STATUS	
	53	08	AC	D0 0009A	MOVL RSLLEN, R3	0322
			13	13 0009E	BEQL 12\$	
	50	0C	AC	D0 000A0	MOVL RSLBUF, R0	0325
			66	16 000A4	JSB LIB\$ANALYZE_SDESC_R2	

LIB\$SYS\_TRNLOG  
1-010

Translate logical name  
Translate logical name

G 1  
16-Sep-1984 01:20:16  
14-Sep-1984 12:39:35

VAX-11 Bliss-32 V4.0-742  
[LIBRTL.SRC]LIBTRNLOG.B32;1

Page 8  
(3)

LIF  
1-

08	63		51	B0	000A6		MOVW	R1, (R3)	:	
	AE		63	B1	000A9		CMPW	(R3), LOCAL_RSLBUF_DESC	:	0326
			04	1B	000AD		BLEQU	12\$	:	
	63	08	AE	B0	000AF		MOVW	LOCAL_RSLBUF_DESC, (R3)	:	0328
	01		54	D1	000B3	12\$:	CMP	TRNLOG_STATUS, #1	:	0338
			04	13	000B6		BEQL	13\$	:	
	50		54	D0	0C0B8		MOVL	TRNLOG_STATUS, R0	:	0340
			C4	000BB			RET		:	
	50		55	D0	000BC	13\$:	MOVL	COPY_STATUS, R0	:	0341
			04	000BF			RET		:	0343

: Routine Size: 192 bytes, Routine Base: \_LIB\$CODE + 0000

```

: 276      0344 1
: 277      0345 1 END
: 278      0346 1
: 279      0347 0 ELUDOM

```

! end of module LIB\$SYS\_TRNLOG

PSECT SUMMARY

Name	Bytes	Attributes
_LIB\$CODE	192	NOVEC, NOWRT, RD, EXE, SHR, LCL, REL, CON, PIC, ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	11	0	581	00:00.8
_\$255\$DUA28:[LIBRTL.OBJ]RTLLIB.L32;1	36	2	5	8	00:00.1

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS\$:LIBTRNLOG/OBJ=OBJ\$:LIBTRNLOG MSRC\$:LIBTRNLOG/UPDATE=(ENH\$:LIBTRNLOG)

```

: Size:      192 code + 0 data bytes
: Run Time:   00:04.6
: Elapsed Time: 00:24.9
: Lines/CPU Min: 4487
: Lexemes/CPU-Min: 27387

```

LIBSYS\_TRNLOG Translate logical name  
1-010 Translate logical name

H 1  
16-Sep-1984 01:20:16

VAX-11 Bliss-32 V4.0-742

Page 9

LI  
1-

: Memory Used: 86 pages  
: Compilation Complete

LIBSPAWN  
LIS

LIBSTATUM  
LIS

LIBTRAAZE  
LIS

LIBSPANC  
LIS

LIBSYMBOL  
LIS

LIBTRNLOG  
LIS

LIBSKPC  
LIS

LIBTIMER  
LIS

LIBTPARSE  
LIS

LIBTRIMF1  
LIS

LIBSTRET  
LIS

LIBTRAE2A  
LIS

